

TECHNOLOGY CAREERS ► JOB SEARCH

Top 7 Big Data Jobs

BY [ALISON DOYLE](#) | Updated on June 19, 2020

Organizations in most sectors of the economy have begun to collect, organize, store, and interpret massive amounts of data related to their operations. In a [recent survey by NewVantage Partners](#), 91.6% of the executives queried said that they were increasing their investments in Big Data. 91.7% of these respondents said they felt their investments were necessary to transform their operations into more agile and competitive businesses.

This is great news for job candidates who are



seeking employment within one of the top big data job fields.

Where the Big Data Jobs Are

Due to the rapid expansion of big data applications, demand for workers has increased dramatically in recent years. LinkedIn reports a significant shortage of data science workers nationally and in major cities in their 2018 [Workforce Report](#): “Nationally, we have a shortage of 151,717 people with data science skills, with particularly acute shortages in New York City (34,032 people), the San Francisco Bay Area (31,798 people), and Los Angeles (12,251 people).”

Top 7 Big Data Jobs

1. Data Scientist

According to [PayScale](#), there are plentiful opportunities for talented information technology (IT) data scientists capable of mining and interpreting complex data for large corporations. Partnering with cross-functional IT teams, they

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compile and create various models of statistical data to inform their development of systems-related recommendations and action plans.

Preferred Qualifications - IT data scientists should have advanced knowledge of different data mining techniques such as clustering, regression

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or Ph.D.) in computer science is usually required for this kind of position, in addition to previous years of work experience in a related field.

Salary: Cited by Glassdoor as #1 in their [50 Best Jobs in America 2019](#) list, data scientists can demand an average salary of \$108,000. An overall job satisfaction score of 4.3/5 was a key factor in this top rating.

2. Data Engineer

Data engineers, as [PayScale](#) points out, utilize their computer science and engineering strengths to aggregate, analyze, and manipulate massive data

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sets. Common tasks include creating and translating computer algorithms into prototype code, developing technical processes to improve data accessibility, and designing reports, dashboards, and tools for end-users.

Preferred Qualifications – Employers typically require that job candidates for data engineering positions have successfully completed a college degree in computer science, engineering, or a related field. They also prefer applicants who have three to five years' experience in the field. Desired technical proficiencies include Linux systems knowledge, proficiency in SQL database design, and a solid command of coding languages such as Java, Python, Kafka, Hive, or Storm. [Soft skills](#) include excellent [written and verbal communication](#) capabilities as well as the ability to work both independently and on teams.

Salary: Glassdoor's [50 Best Jobs in America 2019](#) ranked data engineers in 8th position with an average salary of \$106,000 and job satisfaction

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score of 3.9/5.

3. Data Analyst

[PayScale](#) describes how data analysts gather actionable information about various topics by designing and implementing large-scale surveys. It's their job to recruit survey participants, compile and interpret submitted data, and relay their findings in traditional charts and reports as well as digital formats.

Preferred Qualifications - Individuals looking for data analyst jobs must be knowledgeable in computer programs such as Microsoft Excel, Microsoft Access, SharePoint, and SQL databases. Data analysts also need good communication and presentation skills, with the ability to effectively translate often-complicated information to company stakeholders.

Salary: Data Analysts, ranked 31st on [50 Best Jobs in America 2019](#), take home an average salary of \$60,000, and have a job satisfaction score of 3.9/5.

4. Security Engineer

Security engineers play a vital role in IT disaster planning, aversion, and mitigation. They lessen corporate risk exposure by setting up computer firewalls, detecting and responding to intrusions, and forensically pinpointing systems security issues. They also create and implement test plans for new or updated software and hardware and establish multi-layered defense protocols for computer networks. (Source: [PayScale](#)).

Preferred Qualifications – A bachelor's degree in engineering, computer science, or a related field is needed for this position, along with several years of relevant work experience and, ideally, industry security certifications. In addition to their technical understanding of computer languages and operating systems, security engineers should also possess solid problem-solving and mathematical abilities and the capacity to work independently.

Salary: Security engineers ranked 17th on [50 Best Jobs in America 2019](#), with an average salary of

\$102,000 and a job satisfaction score of 3.8/5.

5. Database Manager

Database managers, trained and highly skilled in [project management](#) and [multitasking](#), perform diagnostics and repair of sophisticated databases. They also review business requests for data and data usage, evaluate data sources to improve data feeds and help to design and install storage hardware. (Source: [PayScale](#))

Preferred Qualifications – Job advertisements for database managers generally list a bachelor's degree in information technology and a minimum of five years in a database leadership position as preferred qualifications. Job candidates for database management roles should also be well-versed in different database software such as MySQL and Oracle.

Salary: Database managers earned an average of \$73,545 according to [Glassdoor](#).

6. Data Architect

Data architects use their knowledge of data-oriented computer languages to organize and maintain data in relational databases and corporate repositories, developing data architecture strategies for each subject area of the enterprise data model.

(Source: [PayScale](#))

Preferred Qualifications – Common job skills and [keyword attributes](#) that employers seek in data architects include advanced technical proficiency (particularly in languages like SQL and XML), excellent [analytical acumen](#), creative visualization, and [problem-solving skills](#), and strong detail orientation. Most data architects have earned at least a bachelor's degree (and, often, an advanced degree) in a computer science-related field.

Salary: Data architects earned some of the highest salaries in the big data sector, an average of \$113,078 according to [PayScale](#).

7. Technical Recruiter

Technical recruiters specialize in sourcing and

screening talented big data, IT, and other technical professionals for candidate pools. They work closely with corporations to assess their hiring needs, and then search the market for the strongest candidates for specific job openings. They also support the professional candidates they recruit throughout the job application, interviewing, hiring, and onboarding processes. (Source: [PayScale](#)).

Preferred Qualifications - Technical recruiters need to have advanced knowledge of the technical qualifications that employers seek in their prospective personnel. Good “[people skills](#)” are also essential, since successful technical recruiters need to build a positive rapport with job candidates during the screening and interviewing stages.

Salary: Glassdoor ranked technical recruiters as #28 on their [List of the 50 Best Jobs in America](#), with a job satisfaction score of 4.1/5 and an average salary of \$48,000.